



make_mask_merge

February 23, 2011

Abstract

`make_mask_merge` creates cheese images for individual exposures using the merged source list from `merge_source_list`. It makes the masks in the three bands of the merged source list: soft, hard, and combined.

1 Instruments/Modes

Instrument	Mode
EPIC	Imaging

2 Use

pipeline processing	no
interactive analysis	yes

3 Description

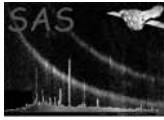
`make_mask_merge` creates cheese images for individual exposures using the merged source list from `merge_source_list`. It makes the masks in the three bands of the merged source list: soft, hard, and combined.

Warning and requirements: `make_mask_merge` is part of the *esas* package integrated into SAS, but it is limited to work within the *esas* data reduction scheme. This is specially true wrt the structure and names of the input files. In particular, `merge_source_list` assumes that other tasks from the package, `mos-spectra` / `pn-spectra`, `cheese-bands`, and `merge_source_list` have been successfully run for the lists to be used.

4 Parameters

This section documents the parameters recognized by this task (if any).

Parameter	Mand	Type	Default	Constraints
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srclist	yes	string	merged-source-list.fits
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Merged source list from merge_source_list

prefix	yes	string	1S001	
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Exposure identifier.

inmask	yes	string	mos1S001-mask-im-750-1250.fits
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Input mask file name.

flimtot	yes	real		
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Combined band source flux threshold (10^{-14} cgs).

flimsoft	yes	real		
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Soft band source flux threshold (10^{-14} cgs).

flimhard	yes	real		
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Hard band source flux threshold (10^{-14} cgs).

scale	yes	real		
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Scale factor for W90 radius.

seper	yes	real		
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Minimum allowed source separation in arc second.

maxlikelim	yes	real		
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Minimum accepted value for the maximum likelihood detection parameter.

5 Input Files

merged-source-list.fits

6 Output Files

Cheese masks in three bands for the specified exposure.
mos or pn*prefix*-msl-cheese.fits -- Total band cheese mask.
mos or pn*prefix*-msl-cheese-s.fits -- Soft band cheese mask.
mos or pn*prefix*-msl-cheese-h.fits -- Hard band cheese mask.

7 Algorithm

8 Comments

References